

stay-at-home naturalist will find equally helpful studies in the essays on domesticated animals. But these are by no means the only subjects treated of in this volume. Extinct animals, armour-clad whales, monkey finger-prints, frogs and toads, and scorpions are amongst the other subjects noticed, and all alike are of extreme interest.

The book is well printed, tastefully got up, and well illustrated, there being no less than sixteen full-page plates, the most remarkable of which is a photograph showing giraffes in covert. The volume would make a handsome gift-book.

*Catalogue of the Lepidoptera Phalaenæ in the British Museum.*

Volume IV. *Catalogue of the Noctuidæ in the Collection of the British Museum.* By Sir GEORGE F. HAMPSON, Bart. London: Printed by Order of the Trustees, 1903. 8vo. Pp. xx, 689. Plates lv.-lxxvii.

WE congratulate Sir George Hampson and the authorities of the British Museum on the publication of the fourth volume of the great Catalogue of the Moths of the world, which has been appearing at intervals during the last six years. With Volume IV. the great family of *Noctuidæ* is commenced, with one of the largest and most important of the subfamilies, the *Agrotinæ*, of which no less than 1126 species are described, by far the larger proportion of which have only been made known within the last few years. To the entomologists of the present day, the wonderful increase in our knowledge of insects and the large collections now in existence appear marvellous. So did Hewitson's collection of Exotic Butterflies to the older generation of naturalists who were his contemporaries; but hundreds of the most beautiful butterflies in the world, which are now to be found in every first-rate collection, were either unique and unattainable, or undiscovered in his time, and he did not live to see them. Our knowledge of moths has also very largely increased, though it cannot be supposed to be so forward as in the case of butterflies, for three reasons: firstly, because they are much more numerous; secondly, because many of them are less brightly coloured, and thus less attractive, and are therefore less assiduously collected; and, thirdly, because many are nocturnal insects and are therefore really more difficult to collect. But nothing is more likely to encourage and extend the knowledge of moths than comprehensive and well-illustrated works like Sir George Hampson's.

In addition to the coloured plates, there are 125 text illustrations, representing structural details. Many larvæ are described, those of North-American species by Dr. Harrison G. Dyar; but there are no illustrations of larvæ, which the character of the book would perhaps hardly admit of. Very full tables of species are given under genera, or, in the case of the larger genera, under sections; and we are glad to notice that when a number of generic names are included under a more comprehensive one (as in the case of *Euxoa*, Hübn., p. 153)

the types of the various names are indicated. This will be very useful for future reference.

At the end of the volume we find a list of unrecognized species, some of which will probably be identified and referred to their proper position at some future time.

*The Fauna of British India, including Ceylon and Burma.* Published under the authority of the Secretary of State for India in Council. Edited by W. T. BLANFORD.—*Rhynchota*. Vol. II. Part 1 (*Heteroptera*). By W. L. DISTANT. London, 1903. Pp. x, 242; figs. 167.

As we are informed that the next part of this work, completing the second volume, will appear very shortly, we will defer our detailed notice until then, and confine ourselves for the present to recording the publication of the present instalment, which extends from Fam. 4. Lygæidæ to the commencement of Fam. 12. Reduviidæ.

*Memoirs of the Geological Survey.—Paleontologia Indica.* Series IX. *The Jurassic Fauna of Cutch.* Vol. III. Part 2. *The Lamellibranchiata*. No. I. *Genus Trigonina*. By F. L. KITCHIN, M.A., Ph.D., Geol. Survey England. 122 pages, Fol. Plates I.-X. Calcutta, London, and Berlin, 1903.

THE *Trigonina* of Cutch here figured and described have been selected from among the Lamellibranchs collected by Wynne, Tedden, Stoliczka, and Blanford, and entrusted to Dr. Kitchin, of London, for examination and description. The strata from which they came are known as the following groups:—I. The Oomia group, probably combining the Cretaceous, Neocomian, partly the Portlandian; II. The Katrol, probably combining the Kimmeridgian and Oxfordian, and constituting the Upper Jurassic of Cutch; III. The Charee, probably representing the Kelloway strata, Middle Jurassic of Cutch; IV. The Patchum, probably representing the Bath Oolite group. These are enumerated in the second edition of the 'Manual of the Geology of India,' 1893, p. 217.

The classification of the known fossil *Trigonina* into sections, groups, and genera is carefully considered and clearly explained. In some cases these serial divisions and subdivisions of recognized forms are separated from their several allies by gaps variable in extent and value, but evidently reducible by better knowledge of the types. The most reliable observers and authors concerned in this classification have been:—Agassiz, 1840; d'Orbigny, 1843; Pictet, 1866; Stoliczka, 1871; Lycett, 1872-1883; Bayle, 1878; Choffat, 1885; and Bigot, 1892. Their methods and results are succinctly stated at pages 7-9.

The differences due to the progress of growth in individuals (as in growth-stages) are taken into consideration on the lines more or